

# Welding 2020 - Update

Friday April 24, 2020

## Explanation

Similar to last year, we are providing the print for this year's project(s) in advanced so that instructors and contestants can prepare prior to the big day. We are providing this to everyone so that all have an opportunity to practice the welds prior to the contest. Please note: **The actual prints used during the contest will be very similar but not exact to the practice prints attached. Thicknesses and size of material and some dimensions may change.**

The cutting torch test will be significantly different this year. The print is attached. **Cutting will be with acetylene as a fuel gas.**

Each contestant will be given the individual parts and need to tack together each weldment according to the blueprints. The contestant will need to read the print and follow the welding procedures for the processes that are specified on the print for each of the welds.

All contestants (secondary and post-secondary) will weld the GTAW project this year.

Once the weldments are completed, it will be turned into the judges for grading. Welding instructors will not be allowed to be in the same area as the contestants while they are welding; however, we will allow welding instructors to witness the grading of the welds. Welding instructors will not be able to speak during the grading process. Once the weldments are graded, the completed weldments will be available for review by the contestants and the instructors. It is our desire that the contest will become an instructional time as well as a skills contest, thus providing additional value to both the instructor and the contestant.

The other component of this is the written test covering: weld symbols, safety, and each of the welding and cutting processes. During the written test you will be able to turn in your resumes.

## Judging criteria

Cutting test - cut to print and cut edge quality (see attached criteria)

Welding test - weld quality for each process, weld size, location and position per print (see attached criteria)

## Rules

- Safety first – PPE & other safe practices
- Integrity – no messing with other people's machines, settings, etc.
- Instructors – not allowed to speak during grading process

## **Clothing / Personal Protective Equipment (Fire-resistant Recommended)**

1. ANST Z-87 approved safety glasses with side shields
2. 100% cotton shirt. To be worn under the welding jacket or cape and bib
3. 100% cotton work pants with no holes or tears
4. Welding cape with sleeves and bib or welding coat
5. Welder's hat or skullcap
6. Leather gauntlet welding gloves (for other than GTAW)
7. Leather welding gloves GTAW
8. Leather boots (steel-toed recommended)  
**(No tennis shoes allowed)**
9. Hearing and/or ear protection
10. **Welding helmet with an appropriate filter plate or lens (#10 or darker) and a protective cover plate for arc welding.**
11. **Welding helmet, face shield, or goggles with an appropriate filter plate or lens (#5-#6) for OFC**

## **Equipment & Tools Recommended**

1. Lead pencil or ball point pen
2. Soap stone with holder or silver welding pencil
3. Steel tape measure
4. Ball peen hammer
5. Combination square
6. Cold chisel
7. Center punch
8. Half round file
9. Oxy-fuel tip cleaner
10. Welding vise grips(suggest 9-r vise grips) 1 pair
11. Pliers
12. Side cutters
13. Welper pliers will substitute for 11 and 12
14. Chipping hammer
15. Carbon steel wire brush
16. Protractor
17. **Cutting tips will be provided**
18. Stainless steel wire brush